

Solve 1-step equations



- 1** Write an equation for each part-whole model.
Work out the value of the linking cube in each equation.

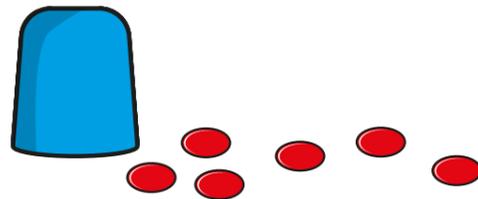
a)

=

b)

=

- 2** There are some counters under the cup.

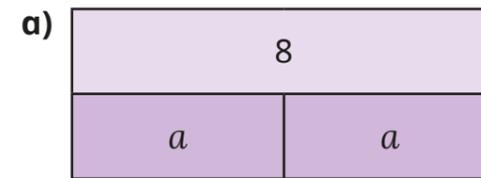


There are 10 counters in total.

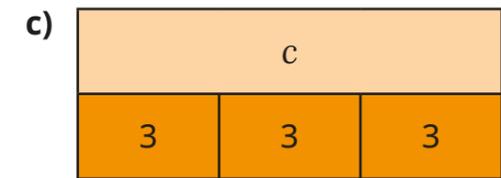
- a) If c is the number of counters under the cup, explain why $c + 6 = 10$
- b) Work out the value of c . $c =$
- c) How many counters are there under the cup?



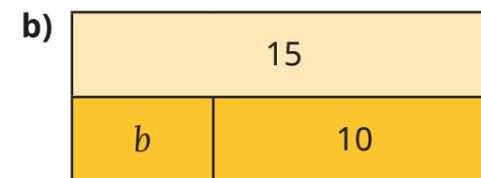
- 3** Write algebraic equations to represent the bar models.
Find the value of the letter in each one.



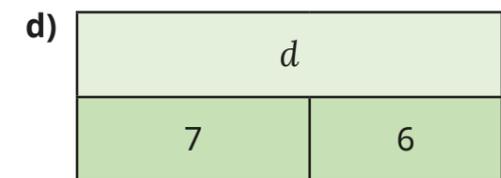
$a =$



$c =$



$b =$



$d =$

- 4** Nijah is solving the equation $x - 8 = 20$

$$x - 8 = 20$$

$$x = 20 - 8$$

$$x = 12$$

What mistake has Nijah made?

5 Solve the equations.

a) $x + 7 = 20$

$x = \square$

b) $10y = 80$

$y = \square$

c) $4m = 22$

$m = \square$

d) $g - 3 = 15$

$g = \square$

e) $32 = t - 5$

$t = \square$

f) $2u = 3$

$u = \square$

6 Max thinks of a number.

He subtracts 5 from his number.

He ends up with 10

a) Write an algebraic equation to represent Max's problem.

b) Solve the equation to work out his number.

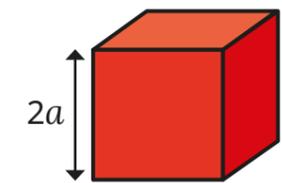
7 Dexter builds a tower.

Each block is $2a$ high.

He uses 7 blocks.

The total height of his tower is 42 cm.

Write an equation to represent the height of Dexter's tower and find the value of a .



$a = \square \text{ cm}$

8 Work out the value of each shape.

Write the equations that you solved to find the value of each shape.

★	♥	★	♥	
★	▲	★	★	
♥	♥	♥	♥	= 40
▲	★	♥	▲	= 20
				= 32

♥ =

★ =

▲ =

Work out the missing total of each row and column.

Compare answers with a partner.

